

A severe North Dakota winter often triggers talk in support of feeding deer and pheasants. While helping wildlife during tough times might seem appropriate to concerned citizens, wildlife professionals believe the negatives of artificial feeding far outweigh the positives.

Feeding wild animals is not a new practice. Providing supplemental forage to enhance or replace natural food supplies was a standard deer management tool in Europe during the Middle Ages.

Some thought it was useful and effective, while others weren't so sure. The debate continued, and in the 1950s studies were done to determine the effectiveness of feeding wildlife. Scientists today believe there are many more adverse consequences of artificial feeding than there are instances where it might be beneficial.

Supplemental feeding does not help an entire wildlife population, but rather focuses on individual animals. In the big picture, wildlife officials say it does little to alleviate concerns of overall population welfare.

If enough feed is provided to benefit the population, then it's also congregating large groups of animals into an area, thus increasing the odds of disease spread and other management problems.

Biologists can rattle off a number of potential disease and management concerns over artificial feeding in North Dakota. Some concerns include spreading of noxious weeds; altering natural animal distribution, thereby reducing deer harvest during hunting season; increased predation; and increased urban depredation and wildlife nuisance issues.

Because of these concerns, wildlife professionals believe in avoiding winter feeding programs. Instead, a better investment is providing habitat that will help animals get through North Dakota's leaner months. "Feeding will not help survival of any wildlife species in situations where other habitat requirements such as space, cover and water are lacking," said Greg Link, North Dakota Game and Fish Department assistant wildlife division chief.

Typically, wildlife die during winter because of their exposure to cold, not because of a lack of food. Ring-necked pheasants rarely die of starvation, Link said, even in harsh winter months. Biologists and game wardens, for instance, have repeatedly discovered well-fed dead pheasants following snowstorms.

Native birds, such as sharp-tailed grouse, have evolved to withstand North Dakota Far left: The North Dakota Game and Fish Department has gradually removed many feeders from its wildlife management areas.

Below: Wildlife food plots adjacent to areas with quality cover are a biologically acceptable form of providing winter food for deer and pheasants.



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Backyard feeders may short-stop or hold birds in northern latitudes, rather than allowing them to naturally continue their way south.

## Cleanliness is Critical to Backyard Bird Feeding Operations

An unclean feeder may perpetuate diseases – such as salmonella – that are easily spread when birds are unnaturally congregated by artificial feeding stations. Feeding stations that are not kept clean may also attract other non-target wildlife such as deer, skunks, raccoons, turkeys, pheasants and squirrels.

Seeds that drop to the ground must be picked up. If this is not done, homeowners are inviting non-target species to the feeders, which may result in unwanted consequences, including damage to vegetation and property.

In extreme cases, species such as white-tailed deer may become attracted to unclean bird feeding stations in urban areas, and are drawn across busy roadways, increasing the likelihood of deervehicle collisions.

winters. Grouse tunnel into an insulating blanket of snow to survive harsh conditions. Nonnative pheasants, on the other hand, expose themselves to the elements and sometimes pay for it.

"Improperly placed artificial food for pheasants can actually be harmful, as it can attract birds away from cover that is necessary for survival," Link said. "Also, artificial feeding of pheasants causes additional concentrations of birds, making them more susceptible to predation."

With feeding wildlife, particularly big game, a distinction needs to be made between providing food in feeders or in a pile, and food plots, said Bill Jensen, Department big game management biologist.

Wildlife food plots adjacent to areas with quality cover are a biologically acceptable form of providing winter food for deer and pheasants, Jensen said. "These food plots don't congregate or crowd individual animals as much, and require animals to forage more naturally," he added.

Additionally, artificial winter feeding can further concentrate and crowd animals, causing stress and creating an environment for disease transmission. Similarly, the spread of parasites is enhanced by crowding animals on winter feeding grounds. "Supplemental feeding of big game animals is an open invitation for transmitting disease," Jensen said.

Although not currently present in North Dakota, diseases of concern include chronic wasting disease, bovine tuberculosis, brucellosis and malignant catarrhal fever. Endemic or naturally occurring diseases, which would otherwise be of minor concern among populations, can also spread rapidly and become exacerbated when animals are clustered around feeding stations.

Furthermore, Jensen said, artificial feeding stations often prevent distribution of food to animals that are most needy. For example, a pecking order is established at deer feeding stations. Dominant adult males and females feed first, and continue to feed until full. Fawns, the most vulnerable in the population to winter starvation, are lowest in the pecking order and the most likely to go without at feeding stations. "As a result, mortality among fawns may still occur even when considerable feed is provided," Jensen said.

Poorly conducted feeding operations may actually kill more deer than those that are helped, Jensen said. "There is a danger for the feed being too high in starches or sugars, thus resulting in acidosis or rumenitis, and ultimately death to the animal in one to three days," he said.

Agricultural interests are also at risk, Jensen said, because feeding deer with grain screenings is a direct threat to those concerned about the spread of noxious weeds. Likewise, feeding programs that maintain high deer numbers will result in localized destruction of browse, vegetation upon which birds and other animals rely for nesting sites and escape cover.

Even the Game and Fish Department's nongame program – long known for promoting backyard bird feeding – is reevaluating its promotional messages, according to Chris Grondahl, Department outreach supervisor. "Backyard bird feeding requires maintenance," Grondahl said, while mentioning potential problems such as disease from unclean feeders, increased risk of depredation, and attracting unwanted wildlife.

The nongame program was developed in the late 1980s, Grondahl said, with the intent of improving an awareness and appreciation for North Dakota's wildlife that's not hunted, fished or trapped. "The Department promoted bird feeding in a variety of different ways," Grondahl said, "from putting on seminars, to providing feeders to nursing homes, to developing written materials, and to educating citizens on how to feed birds and build feeders."

Biologists continued these activities for 15 years, hoping people of all ages would be attracted to bird watching and learn about a variety of bird species and the importance of protecting habitats.

Within the past few years, the backyard bird feeding philosophy has evolved. "We believe that it is important for citizens to know and appreciate our wildlife, including songbirds," Grondahl said. "There are, however, some changes being made in how we administer and promote this activity."

For instance, feeding birds in a back yard may be more responsibly accomplished by using native vegetation, such as fruit bearing shrubs like chokecherry, Juneberry and golden currant. "A back yard with sufficient native cover and food is much more beneficial to songbirds than a five-acre yard of Kentucky bluegrass with a couple of bird feeders by the window," Grondahl said.

A back yard planting should include food that attracts birds, like Maximillian sunflower, native grasses, and vines such as riverbank grape – all of which have seeds to which birds are naturally attracted.

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Wildflowers and other forbs can also attract insects, which in turn attract birds that feed on these plants.

"By providing habitat in the form of trees, shrubs, grasses and vines, birds may have a better chance of finding cover during an early winter storm," Grondahl said. "Bird feeding should be used as a means of enjoying the variety of species and learning more about their habitats and behaviors, while at the same time realizing artificial food sources do not play a significant role in perpetuating the well being of the species. In other words, songbird populations are not enhanced by our feeding them, and the populations will survive naturally without our help."

A study conducted following a bird die-off in Ohio showed that the dead birds had full bellies, but died of exposure since there was no cover nearby.

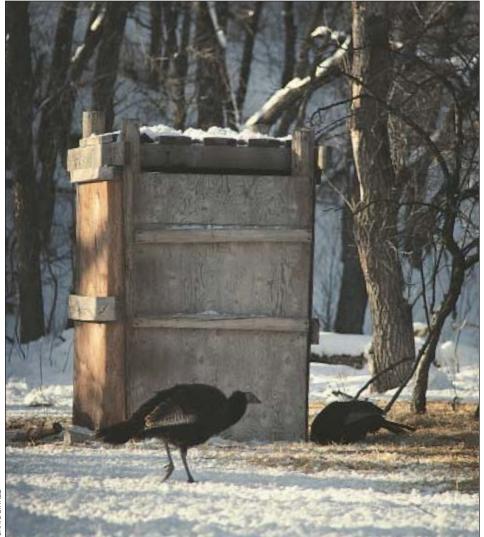
Backyard feeders may also short-stop or hold birds in northern latitudes, Grondahl said, rather than allowing them to naturally continue their way south. "Most songbirds migrate through the state because they are unable to adapt to northern climates," he said

Artificial feeding may provide some limited, short-term benefits, Link said, such as temporarily enticing animals away from stored livestock supplies, increasing winter survival among individual animals, and providing an avenue for public involvement and viewing.

However, the common thread for wildlife survival has been and continues to be abundant habitat. And, according to Link, no amount of artificial feeding will replace the need for adequate cover. "Supplemental feeding of wildlife is of very little benefit to the animal for survival," he said. "As we so often mention, the key is cover. It begins and ends with habitat."

**GREG FREEMAN** is the Game and Fish Department's news editor.

Winter feeding can at times concentrate animals, thus increasing the possibility of diseases being spread.



## Supplemental Winter Food

For many years the North Dakota Game and Fish Department used wildlife feeders to provide supplemental winter food on state wildlife management areas. The idea was to provide wildlife food next to key winter habitat on WMAs without cropland, reduce wildlife depredation to neighboring farming/ranching operations, and increase wildlife on WMAs for public opportunities.

For years, Department officials have realized that problems associated with winter wildlife feeding outweigh the benefits. For that reason, wildlife feeding as a management tool has been gradually phased out in the last decade.

In 1985 the Department maintained about 240 wildlife feeders on its WMAs, and fewer than 10 feeders are in operation today.

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